

## DOCUMENT RESUME

ED 117 066

SP 009 762

AUTHOR Smith, Gary R.  
 TITLE Study of the Michigan Professional Register  
 1967-1974.  
 SPONS AGENCY Central Michigan Univ., Mount Pleasant.; Eastern Michigan Univ., Ypsilanti.; Michigan State Univ., East Lansing.; Northern Michigan Univ., Marquette.  
 PUB DATE Dec 74  
 NOTE 43p.

EDRS PRICE MF-\$0.76 HC-\$1.95 Plus Postage  
 DESCRIPTORS Administrator Characteristics; \*Elementary Secondary Education; \*Professional Personnel; \*Public Schools; Tables (Data); Teacher Characteristics  
 IDENTIFIERS \*Michigan

## ABSTRACT

This report uses the 1973-74 Michigan Professional Personnel Register to update earlier studies of professional personnel in Michigan's public elementary and secondary schools. The report includes descriptions of all professional personnel employed in Michigan public schools from 1967-68 through 1973-74 school years. The topics included in this report are (1) annual attrition or loss of professional personnel, (2) return of professional personnel after leaving schools for one year or more, (3) loss of teachers with varying years of teaching experience, (4) comparison of the number of teachers and administrators prepared by each institution, (5) comparison of teacher characteristics (number of new teachers, degrees, mean salaries, race, and teaching experience), (6) comparison of administrator characteristics (number of administrators, degrees, mean salary, race, and years of experience), and (7) comparison of a number of institution graduates in the tricounty area of Wayne, Oakland, and Macomb counties. The results of the study for each of the seven topics are discussed prior to the presentation of the 29 tables which give the actual statistics.

(RC)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

sol.

Funding for this report was provided by a Consortium of Colleges of Education from Central Michigan University, Eastern Michigan University, Northern Michigan University, Michigan State University, University of Michigan, Wayne State University and Western Michigan University

STUDY OF THE MICHIGAN PROFESSIONAL REGISTER 1967-1974

by

Dr. Gary R. Smith  
College of Education  
Wayne State University  
Detroit, Michigan 48202

December, 1974

U S DEPARTMENT OF HEALTH  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATEO DO NOT NECESSARILY REPRE-  
SENT OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

This report uses the 1973-1974 Michigan Professional Personnel Register to update the earlier studies of professional personnel in Michigan's Public Elementary and Secondary schools. It includes the major teacher education institutions which have trained these teachers and administrators, e.g., Central Michigan, Eastern Michigan, Northern Michigan, Michigan State, University of Michigan, Wayne State, Western Michigan, and Out-of-State institutions. It also includes as a group the graduates of other Michigan colleges who are employed as teachers or administrators in Michigan Public Schools. Therefore, the report includes descriptions of all professional personnel employed in Michigan Public Schools from 1967-1968 through 1973-1974 school years.

The topics included in this report are:

- a) Annual attrition or loss of professional personnel.
- b) Return of professional personnel after leaving schools for one year or more.
- c) Loss of teachers with varying years of teaching experience.
- d) Comparison of the number of teachers and administrators prepared by each institution.
- e) Comparison of teachers' characteristics (number of new teachers, degrees, mean salaries, race, teaching experience).
- f) Comparison of administrators' characteristics (number of administrators, degrees, mean salary, race, years of experience).
- g) Comparison of number of institutions' graduates in tri-county area of Wayne, Oakland or Macomb Counties.

The source of data for this study was the Professional Personnel Register, which is collected and maintained annually by the Teacher Education and Professional Service Department of the Michigan Department of Education. We obtained computer tape copies of the Register for the school years 1967-1968 through 1973-1974 and we wrote programs to conduct analyses of the data to generate various parts of this report.

The Registers from 1967-1968 through 1973-1974 contain a total of approximately 600,000 individual records. For each individual, it contains the following information: social security number, name of intermediate school district, local school district, certificate type, training institution, highest degree, majors, minors, K-12 assignment, teaching level, salary, race, sex, teaching experience, birthdate. A listing of these traits is included at the end of this report. Information about professional personnel in Michigan schools during 1971-1972 is not included in this study because it was not collected by the Michigan Department of Education.

Since the social security number is a unique identifier, it has been possible to trace the employment of teachers in public schools from 1967 through 1974. This provides empirical evidence of the attrition of graduates from the various institutions. It has also provided a modest basis for estimating the extent to which teachers who leave the public schools of Michigan return to teaching at a later date. Both of these elements, attrition and return of former teachers to active employment in public schools, are important in

deliberations over supply and demand for teaching personnel in the State.

Annual Attrition of Professional Personnel:

For each institution or group of institutions, Table 1 summarizes the attrition of professional personnel (teachers and administrators) who were teaching in Michigan Public Schools in 1967 but not in 1968. Loss of a teacher or administrator was established by determining that the person's social security number was present in the 1967-1968 file, but it was missing from the Register for 1968-1969.

Table 1 indicates that 91037 teachers and administrators were employed in 1967-1968 and 78046 of them returned in 1968-1969. This represents a loss of 12991 or 14% of the 1967-1968 professorial staff.

Tables 2 through 5 provide similar data showing the annual losses of professorial personnel from 1969 through 1974. It is important to note that the attrition rate has declined from 14% during 1968, 1969, and 1970 to 10% in 1974. That is, at a time when teaching positions are difficult to acquire, fewer persons are willing to leave voluntarily and the data do not indicate the number who may have been asked to leave because of declining enrollment or for other reasons.

In 1967-68 there was a substantial range in attrition rates among the institutions. The lowest attrition rate in 1967-68 was 11% for graduates of CMU and the highest rate was 18% for graduates of out-of-state institutions, which produced a range of 8%. However Table 5 indicates that the range had dropped to 4% by 1973-74. This indicates that the attrition is more uniform in affecting graduates of all institutions.

### Return of Professional Personnel

Tables 6, 7, 8 provide a modest basis for estimating the return of professional personnel who were teaching in 1967, were not employed in schools in 1968, but returned to schools in 1969, 1970, 1972 or 1973. Table 6 indicates that for the group who left teaching, the average proportion returning is 14% the first year, 5% for the second year, 3% in the third and fourth years, and 1% in the fifth year. The highest return for a single year is in the year immediately following departure, i.e., (14%). In the perspective of 5 years, one may estimate that about 23% of the personnel who leave the schools will return within five years. When compared to all Michigan professional personnel, this is about 3.2% and close to the NEA estimate of returning teachers.

Similar patterns of professional personnel returning to the schools are presented in tables 7 and 8.

### Total Professional Personnel (1967-1974)

Table 9 shows the total number of teachers and administrators employed each school year from 1967-1968 through 1973-1974 and it indicates the institutions which trained them. Numbers at the bottom of the table indicate the total professional personnel employed in Michigan each year and the annual rates of change in their employment. There was a 7% increase in professional personnel from 1967-68 to 1968-1969. Thereafter, the rate of change is positive but diminishing, i.e., 2.8%, 2.1%, 1.7%, 1.3%.

Employment was increasing for graduates of CMU (3.5%), MSU (2.9%),

NMU (2.4%), WMU (1.7%), and other Michigan institutions (4.8%). For three Michigan institutions, WSU, EMU, UM, there was no appreciable change in the total number of their graduates employed in Michigan Public Schools.

The employment of teachers and administrators from out-of-state institutions increased from 1967 until 1970-1971. Then there was a decline in employment of out-of-state teachers which has continued into 1973, although employment was increasing for graduates from the teacher training institutions within the State.

For total number of employed graduates, out-of-state institutions are consistently highest with 17.5% of all Michigan teaching personnel, while WSU, WMU, MSU, CMU, and EMU contribute more than 10,000 teachers apiece.

#### Teaching Experience and Loss of Teachers

Tables 10 through 18 show the loss of classroom teachers for each institution in relation to years of teaching experience. The data apply to all classroom teachers who were employed in public schools in 1972-1973, but who were not employed in 1973-1974.

As indicated in the previous reports, there is a high loss of teachers with 0, 1, 2, or 3 years experience. Thereafter the proportion leaving teaching decreases rapidly. The last two entries in each table (7-9 years, 10 or more) have high percent values because they include several years rather than a single year.

High losses of teachers with 0 to 3 years experience are prominent

for graduates of out-of-state institutions, which have losses ranging from 18% to 25%. However, the losses are lower than during previous years, when 30% to 40% of these "beginning teachers" did not return to teaching after one or two years of teaching experience.

#### Number of Teachers and Administrators (1973-1974)

Tables 19 and 20 show the number of classroom teachers, teachers assigned to central administration, and administrative positions in public schools during 1973-1974. The percents in the table indicate changes in each category from 1972-1973 to 1973-1974. For example, total professional personnel varied from no change for UM and WSU to an increase of 3% for CMU and MSU, and an increase of 5% in graduates of other Michigan institutions. Only Out-of-State showed a decrease, of -1%.

The proportion of classroom teachers showed a decrease for EMU (-1%) and for graduates of out-of-state institutions (-2%). There was no change in the proportion of teachers from UM or WSU, while there were increases up to 5% for the graduates of MSU (3%), CMU (3%), NMU (3%), WMU (2%), and other Michigan institutions (5%).

Administrative positions showed increases of 1% (WSU) to 7% (MSU), which is considerably smaller than the 3% to 17% increases recorded in 1972-1973. There was no percent increase for WMU and a slight decrease for UM. (-1%).

#### Characteristics of Teachers (1972-1973)

Tables 21 and 22 indicate major characteristics of teachers in

public schools during 1973-1974. Numbers in parentheses indicate percent change from 1972-1973 to 1973-1974.

#### New Teachers

The employment of new teachers, i.e., no previous teaching experience, has continued to decrease for MSU (-3%), NMU (-4%), Out-Of-State (-5%), WMU (-7%), EMU (-10%) and WSU (-20%). Only CMU (12%) and UM (4%) showed increase in employment of their new teachers, while employment of new teachers from other Michigan institutions showed no appreciable change.

#### Degrees:

Formal education of Michigan teachers indicates slight variations in the number of teachers with bachelor's degrees. Out-of-state teachers with bachelor's degrees decreased -7% while other institutions changed 4% or less.

There was an increase in the number of Michigan teachers with masters degrees. The increase ranged from 5% (EMU) to 12% (CMU) with employment of MSU and out-of-state teachers with a masters degree showing an increase of 10% and 9% respectively.

The number of teachers without a degree decreased sharply. For graduates of WSU, WMU, EMU, and NMU, the decrease was more than -35%.

#### Salary:

Average salary in 1973-1974 for all classroom teachers in

Michigan was \$12,579 which is a 5% increase over the average of \$11,976 for 1972-1973. Although WSU teachers have the highest average salary (\$13,702) they again registered the lowest percent increase (3%) from 1972-1973 to 1973-1974. Out-of-State and MSU teachers obtained 6% increase.

Race:

From 1972-1973 to 1973-1974, the number of Caucasian teachers increased from 89216 to 90356, which was a 1% increase. During the same period the total number of Negro-Americans teaching in Michigan Public Schools increased from 7804 to 8193, which represents a 5% increase since 1972-1973. Negro-Americans represent 9% of Michigan's Public School teaching force.

The number of Negro-Americans who graduated from Michigan institutions and who were teaching in Michigan Public Schools increased 10% in 1973-1974. However, the Michigan institutions trained only 56% of the Negro-Americans teaching in the public schools, while the remaining 44% were trained and recommended for certification by institutions outside of Michigan. Approximately 29% were trained and recommended for certification by WSU.

The number of Spanish American, Indian, and Oriental teachers representing each university was so small that percent increases of 28% represent actual increases of only 8 persons.

Teaching Level:

There was an increase from 5203 to 5633 (8%) of the classroom teachers who were assigned to all grade levels. A substantial amount of this growth may be attributed to the increase in Special Education teachers, who are authorized to work with handicapped pupils at any age or grade level.

Although there were institutional variations, there was an average decrease of -1% for elementary teachers and an average increase of 2.5% for senior high school teachers.

The average change in the number of junior high school teachers and junior/senior high school teachers was 4.5% and 3% respectively.

Characteristics of Administrators (1973-1974)

Tables 23 and 24 indicate the major characteristics of administrators in public school during 1973-1974. There were 8065 administrators in Michigan Public Schools during 1973-1974, which is 7.5% of the State's entire professional group. Numbers in parentheses in the tables indicate percent change from 1972-1973 to 1973-1974.

Degrees - The number of administrators with bachelors degrees has generally increased; however, the majority of administrators have masters degrees or higher formal education. There were 6304 administrators (78%) who had the masters degree as their highest degree.

Graduates of WSU and out-of-state institutions had 1236 and 994 administrators with masters degrees. Modest growth at the masters level was displayed by CMU (6%) and MSU (9%).

The doctorate was achieved by 489 administrators (6%) and the specialist certificate was achieved by 531 administrators (7%).

Salary - Average salary for 1972-1973 for all administrators was \$20260. This represents an average increase of 5% from the 1972-1973 average of \$19333. Administrators from WSU had the highest average salary, \$22188; however, this may simply reflect the concentration of those administrators in the metropolitan Detroit area, where the cost of living appears to be substantially higher than in other regions of the State. Administrators who graduated from NMU had the lowest average salary, but this may also simply reflect geographic location of the administrative position.

Race - WSU recorded the largest number of Caucasian administrators 1121, but the growth rate was decreasing (-3%). Substantial numbers of Caucasian administrators were trained by MSU (901), WMU (854), EMU (789), CMU (772) and they were increasing at rates between 2% and 7%.

More than 1100 Caucasian administrators were trained by out-of-state institutions but the growth rate has dropped to zero.

Administrators who are Negro-Americans increased from 728 in 1972-1973 to 847 in 1973-1974, which represents a 16% increase. Negro-Americans compose 10.5% of the administrator group in Michigan Public Schools.

Increases in the proportion of Negro-American administrators occurred for graduates of UM (13%), MSU (27%), WSU (18%), EMU (12%), and out-of-state institutions (12%). However, the number of Negro-Americans from each institution is small and a slight numerical increase can create a deceptively large percent increase. The number of administrators who are Spanish-American, Indian, or Oriental is less than 35 individuals for all institutions in the State.

#### Wayne, Oakland, Macomb Professional Personnel

Tables 25 and 26 indicate the number of professional personnel who were employed in public schools in Wayne, Oakland or Macomb Counties. Wayne State (94%) continued to have a large proportion of its graduates in the tri-county area, with particularly heavy concentration of personnel in Wayne County.

Eastern Michigan, University of Michigan, other Michigan institutions and out-of-state institutions have 40% to 60% of their graduates located in school districts in the tri-county area. Western Michigan, Central Michigan, and Northern Michigan have only 17% to 18% of their graduates in the tri-county area.

Estimate of Precision of Data:

In processing the computer file of the Professional Personnel Register, we have encountered instances where there was some duplication of social security numbers, alphabetic characters in numeric fields, missing data, or undefined code values. In an annual file of 100,000 records there are 24 separate fields or 2,400,000 pieces of information which might be inaccurate. The frequency of these flaws has been less than .01%. We felt that this was sufficiently precise for our purposes and the expense of further reducing error was not warranted.

One school district has checked their personnel records to confirm that our tape file was accurate with respect to social security number, name, majors, minors, assignments, and other fields in the Register. Their check of 169 teachers and administrators in the 1969 Register established an exact agreement. This does not eliminate the presence of errors in other parts of the file, but it does lead to an increased confidence in the precision of the Register.

TABLE 1

ATTRITION OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS)  
 IN MICHIGAN PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT WAYNE STATE UNIVERSITY, MICHIGAN  
 STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, UNIVERSITY  
 OF MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN,  
 OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE

Institution	1967 Personnel		1967 Person. In Schools In 1968		Loss
	Personnel	In 1968	Personnel	In Schools	
CMU	9162	8116	1046	(11%)	
WSU	12933	11439	1494	(12%)	
MSU	9824	8260	1564	(16%)	
WMU	11375	9982	1393	(12%)	
EMU	9983	8711	1272	(13%)	
UM	6485	5438	1047	(16%)	
NMU	3346	2933	413	(12%)	
OTHER MICH. INST.	8635	7394	1241	(14%)	
OUT OF STATE	19294	15773	3521	(18%)	
TOTAL PROF. PERSONNEL FOR MICHIGAN 1967	91037		12991	(14%)	3
			78046		

TABLE 2

ATTRITION OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS)  
 IN MICHIGAN PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT WAYNE STATE UNIVERSITY, MICHIGAN  
 STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, UNIVERSITY  
 OF MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN,  
 OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE

Institution	1968 Personnel		Loss
	In Schools	In 1969	
CMU	9838	8632	1206 (12%)
WSU	13332	11733	1599 (12%)
MSU	11093	9331	1762 (16%)
WMU	12191	10571	1620 (13%)
EMU	10255	9030	1225 (12%)
UM	6870	5775	1095 (16%)
NMU	3483	3061	422 (12%)
OTHER MICH. INST.	9267	7870	1397 (15%)
OUT OF STATE	21126	17335	3791 (18%)
TOTAL PROF. PERSONNEL FOR MICHIGAN 1968	97455	83338	14117 (14%)

TABLE 3

ATTRITION OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS)  
 IN MICHIGAN PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT WAYNE STATE UNIVERSITY, MICHIGAN  
 STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, UNIVERSITY  
 OF MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN,  
 OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE

Institution	1969 Personnel	1969 Person. In Schools In 1970	Loss
CMU	10270	9027	1243 (12%)
WSU	13320	12070	1250 (9%)
MSU	11681	9970	1711 (15%)
WMU	12586	10963	1623 (13%)
EMU	10592	9353	1239 (12%)
NMU	6989	6010	979 (14%)
OTHER MICH. INST.	3644	3225	419 (11%)
OUT OF STATE	9920	8261	1659 (17%)
TOTAL PROF. PERSONNEL FOR MICHIGAN 1969	21210	17641	3569 (17%)
			13692 (14%)
			86520

TABLE 4

ATTRITION OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS)  
 IN MICHIGAN PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT WAYNE STATE UNIVERSITY, MICHIGAN STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, UNIVERSITY OF MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE.

Institution	1970 Personnel	1970 Person... In Schools In 1972		Loss
		1970 Person... In Schools In 1972	1970 Person... In Schools In 1972	
CMU	10747	8910	—	1837 (17%)
WSU	13780	11402	—	2378 (17%)
MSU	12394	10044	—	2350 (19%)
WMU	12983	10554	—	2429 (19%)
EMU	10912	9036	—	1876 (17%)
UM	7051	5640	—	1411 (20%)
NMU	3759	3159	—	600 (15%)
OTHER MICH. INST.	10401	8524	—	1877 (18%)
OUT OF STATE	20242	16006	—	4236 (21%)
TOTAL PROF. PERSONNEL FOR MICHIGAN 1970	102269	83275	—	18994 (19%)

TABLE 5

ATTRITION OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS)  
 IN MICHIGAN PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT WAYNE STATE UNIVERSITY, MICHIGAN  
 STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, UNIVERSITY  
 OF MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN,  
 OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE

Institution	1972 Personnel	1972 Person. In Schools In 1973	Loss
CMU	11587	10398	1189 (10%)
WSU	14168	12947	1221 (9%)
MSU	13280	11859	1421 (11%)
WMU	13494	12147	1347 (10%)
EMU	11351	10134	1217 (11%)
UM	7086	6246	840 (12%)
NMU	4003	3658	345 (9%)
OTHER MICH INST.	11746	10572	1174 (10%)
OUT OF STATE	19120	17089	2031 (11%)
TOTAL PROF. PERSONNEL FOR MICHIGAN 1972	105835	95050	10785 (10%)

TABLE 6

RETURN OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS) IN MICHIGAN  
 PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION  
 AT WAYNE STATE UNIVERSITY, MICHIGAN STATE, WESTERN MICHIGAN,  
 EASTERN MICHIGAN, UNIVERSITY OF MICHIGAN, CENTRAL MICH-  
 IGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INST-  
 ITUTIONS, AND OUT OF STATE

Institution	1967 Personnel Loss	1967 Person Returned In 1969	1967 Person Returned In 1970	1967 Person Returned In 1972	1967 Person Returned In 1973
CMU	1046	179 (17%)	70 (7%)	50 (5%)	9 (1%)
WSU	1494	211 (14%)	66 (4%)	55 (4%)	18 (1%)
MSU	1564	234 (15%)	92 (6%)	52 (3%)	18 (1%)
WMU	1393	195 (14%)	70 (5%)	34 (2%)	21 (2%)
EMU	1272	204 (16%)	65 (5%)	37 (2%)	16 (1%)
UM	1047	131 (13%)	54 (5%)	29 (3%)	8 (3%)
NMU	413	51 (13%)	20 (5%)	15 (4%)	3 (1%)
OTHER MICH. INST.	1241	186 (15%)	63 (5%)	43 (3%)	21 (2%)
OUT OF STATE	3521	383 (11%)	136 (4%)	85 (3%)	28 (1%)
TOTAL PROF. PERSONNEL IN MICHIGAN	12989	1774 (14%)	636 (5%)	400 (3%)	142 (1%)

TABLE 7

RETURN OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS) IN MICHIGAN  
 PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION  
 AT WAYNE STATE UNIVERSITY, MICHIGAN STATE, WESTERN MICHIGAN,  
 EASTERN MICHIGAN, UNIVERSITY OF MICHIGAN, CENTRAL MICH-  
 IGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INST-  
 ITUTIONS, AND OUT OF STATE

Institution	1968 Personnel Loss	1968 Person Returned In 1970	1968 Person Returned In 1972	1968 Person Returned In 1973
CMU	1206	208 (17%)	71 (6%)	27 (2%)
WSU	1599	234 (15%)	227 (14%)	18 (1%)
MSU	1762	259 (15%)	132 (7%)	40 (2%)
WMU	1620	218 (14%)	89 (5%)	20 (1%)
EMU	1225	174 (14%)	73 (6%)	15 (1%)
UM	1095	139 (13%)	76 (7%)	8 (1%)
NMU	422	58 (14%)	20 (5%)	11 (3%)
OTHER MICH. INST.	1397	219 (16%)	70 (5%)	25 (2%)
OUT OF STATE	3791	395 (10%)	199 (5%)	33 (1%)
TOTAL PROF. PERSONNEL IN MICHIGAN	14117	1904 (13%)	957 (7%)	197 (1%)

TABLE 8

RETURN OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS) IN MICHIGAN  
 PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION  
 AT WAYNE STATE UNIVERSITY, MICHIGAN STATE, WESTERN MICHIGAN,  
 EASTERN MICHIGAN, UNIVERSITY OF MICHIGAN, CENTRAL MICH-  
 IGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INST-  
 ITUTIONS, AND OUT OF STATE

Institution	1969 Personnel Loss	1969 Person Returned In 1972	1969 Person Returned In 1973
CMU	1243	223 (18%)	44 (4%)
WSU	1250	257 (20%)	32 (3%)
MSU	1711	345 (29%)	70 (4%)
WMU	1623	255 (16%)	45 (3%)
EMU	1239	195 (16%)	27 (2%)
UM	979	164 (17%)	14 (1%)
NMU	419	57 (14%)	13 (3%)
OTHER MICH <sup>n</sup> INST.	1659	229 (14%)	44 (3%)
OUT OF STATE	3569	503 (14%)	79 (2%)
TOTAL PROF. PERSONNEL IN MICHIGAN	2228 (16%)	13692	368 (3%)
			20.

TABLE 9

COMPARISON OF TOTAL PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS)  
 IN MICHIGAN PUBLIC SCHOOLS WHO RECEIVED THEIR INITIAL PROFESSIONAL  
 EDUCATION AT WAYNE STATE UNIVERSITY, MICHIGAN STATE, WESTERN  
 MICHIGAN, EASTERN MICHIGAN, UNIVERSITY OF MICHIGAN, CENTRAL  
 MICHIGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INSTITUTIONS,  
 AND OUT OF STATE

Institution	1967-68	1968-69	1969-70	1970-71	1972-73	1973-74
NMU	3346	3483	3644	3759	4003	4102
WSU	12933	13332	13320	13780	14168	14162
MSU	9824	11093	11681	12394	13280	13664
WNU	11375	12191	12586	12983	13494	13719
EMU	9983	10255	10592	10912	11351	11313
UM	6485	6870	6989	7054	7086	7099
CMU	9362	9838	10270	10747	11587	11991
OTHER MICH. INST.	8635	9267	9920	10401	11746	12315
OUT OF STATE	19294	21126	21210	20242	19120	18824
TOTAL FOR MICHIGAN	91037	97455	100212	102269	105835	107194
ANNUAL RATE OF CHANGE	7%	2.8%	2.1%	1.7%	1.3%	21.

TABLE 10

LOSS OF CENTRAL MICHIGAN GRADUATES FROM TEACHING STAFF  
 OF MICHIGAN PUBLIC SCHOOLS  
 (1972-1973)

Teachers in Michigan Public Schools

Teaching Experience (Years)	1972 CMU Graduates	1972 CMU Graduates in Schools in 1973	Loss
0	1018	860	16%
1	1079	948	12%
2	928	792	15%
3	855	747	13%
4	727	636	13%
5	618	554	10%
6	503	458	9%
7-9	1182	1113	6%
10 or more	3936	3600	9%

TABLE 11

LOSS OF WAYNE GRADUATES FROM TEACHING STAFF  
 OF MICHIGAN PUBLIC SCHOOLS  
 (1972-1973)

Teachers in Michigan Public Schools

Teaching Experience (Years)	1972 WSU Graduates	1972 WSU Graduates in Schools in 1973	Loss
0	583	490	16%
1	531	475	11%
2	755	679	10%
3	624	543	13%
4	702	614	13%
5	735	643	13%
6	491	450	8%
7-9	2288	2117	8%
10 or more	5975	5539	7%

TABLE 12

**LOSS OF MICHIGAN STATE GRADUATES FROM TEACHING STAFF  
OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)**

Teachers in Michigan Public Schools

Teaching Experience (Years)	1972 MSU Graduates	1972 MSU Graduates in Schools in 1973	Loss
0	1128	932	17%
1	1219	1036	15%
2	1239	1034	17%
3	1131	976	14%
4	1041	906	13%
5	859	746	13%
6	720	655	9%
7-9	1698	1610	5%
10 or more	3371	3154	6%

TABLE 13

**LOSS OF WESTERN MICHIGAN GRADUATES FROM TEACHING STAFF  
OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)**

Teachers in Michigan Public Schools

<u>Teaching Experience (Years)</u>	<u>1972 WMU Graduates</u>	<u>1972 WMU Graduates in Schools in 1973</u>	<u>Loss</u>
0	1060	926	13%
1	1129	996	12%
2	1139	995	13%
3	995	860	14%
4	877	769	12%
5	774	695	10%
6	714	661	7%
7-9	1445	1354	6%
10 or more	4480	4081	9%

TABLE 14

**LOSS OF EASTERN MICHIGAN GRADUATES FROM TEACHING STAFF  
OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)**

Teachers in Michigan Public Schools

<u>Teaching Experience (Years)</u>	<u>1972 EMU Graduates</u>	<u>1972 in Graduates in Schools in 1973</u>	<u>Loss</u>
0	797	688	14%
1	752	653	13%
2	853	741	13%
3	684	587	14%
4	682	596	13%
5	620	554	11%
6	540	477	12%
7-9	1391	1294	7%
10 or more	4224	3801	10%

TABLE 15

**LOSS OF UNIVERSITY OF MICHIGAN GRADUATES FROM TEACHING STAFF  
OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)**

Teachers in Michigan Public Schools

<u>Teaching Experience (Years)</u>	<u>1972 UM Graduates</u>	<u>1972 UM Graduates in Schools in 1973</u>	<u>Loss</u>
0	421	322	24%
1	428	350	18%
2	491	397	19%
3	421	343	19%
4	439	370	16%
5	395	339	14%
6	308	270	12%
7-9	912	831	9%
10 or more	2565	2372	8%

TABLE 16

**LOSS OF NORTHERN MICHIGAN GRADUATES, FROM TEACHING STAFF  
OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)**

Teachers in Michigan Public Schools

<u>Teaching Experience (Years)</u>	<u>1972 NMU Graduates</u>	<u>1972, NMU Graduates in Schools in 1973</u>	<u>Loss</u>
0	307	259	16%
1	316	274	13%
2	301	264	12%
3	285	253	11%
4	272	251	8%
5	249	235	6%
6	220	207	6%
7-9	456	436	4%
10 or more	1284	1186	8%

TABLE 17

LOSS OF GRADUATES OF OTHER MICHIGAN INSTITUTIONS FROM  
TEACHING STAFFS OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)

Teachers in Michigan Public Schools

Teaching Experience (Years)	1972 Graduates Other Mich. Inst.	1972 Graduates Other Mich. Inst. in Schools in 1973	Loss
0	988	822	17%
1	1052	916	13%
2	940	796	15%
3	863	739	14%
4	788	682	13%
5	623	553	11%
6	571	522	9%
7-9	1526	1427	6%
10 or more	3676	3448	6%

TABLE 18

**LOSS OF OUT-OF-STATE GRADUATES FROM TEACHING STAFF  
OF MICHIGAN PUBLIC SCHOOLS  
(1972-1973)**

Teachers in Michigan Public Schools

Teaching Experience (Years)	1972 Out-Of-State Graduates	1972 Out-Of-State Graduates in Schools in 1973	Loss
0	621	466	25%
1	659	522	21%
2	988	801	19%
3	1103	907	18%
4	1308	1104	16%
5	1280	1119	13%
6	1116	1001	10%
7-9	3246	2975	8%
10 or more	7471	6964	7%

TABLE 13

COMPARISON OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS) IN MICHIGAN PUBLIC SCHOOLS (1973-1974) WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT UNIVERSITY OF MICHIGAN, MICHIGAN STATE, WAYNE STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE

	UM	MSU	WSU	WMU	EMU
Total Professional Personnel	7099 (0%)	13669 (3%)	14162 (0%)	13719 (2%)	11313 (0%)
a) Classroom teachers assigned to elementary, junior high, or secondary schools	6337 (0%)	12667 (3%)	12514 (0%)	12809 (2%)	10450 (-1%)
b) Certified teachers assigned to central administration	61 (-5%)	62 (7%)	143 (-9%)	32 (7%)	26 (-7%)
c) Administrators assigned to elementary, junior high, or secondary schools or to central administration	701 (-1%)	940 (7%)	1505 (1%)	878 (0%)	837 (4%)

\*The actual percentages between 0 and .5 are shown as 0%

TABLE 20

COMPARISON OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS IN MICHIGAN PUBLIC SCHOOLS 1973-1974) WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT UNIVERSITY OF MICHIGAN, MICHIGAN STATE, WAYNE STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INSTITUTIONS, AND OUT OF STATE

	CMU	NMU	Other Mich. Institutions	Out of State
Total Professional Personnel	11991 (3%)	4102 (2%)	12315 (5%)	18824 (-1%)
a) Classroom teachers assigned to elementary, junior high, or secondary schools	11173 (3%)	3770 (3%)	11526 (5%)	17350 (-2%)
b) Certified teachers assigned to central administration	33 (0%)	6 (-33%)	42 (11%)	128 (12%)
c) Administrators assigned to elementary, junior high, or secondary schools or to central administration	785 (6%)	326 (3%)	747 (3%)	1346 (2%)

32.

34

TABLE 21

COMPARISON OF CERTIFIED CLASSROOM TEACHERS IN MICHIGAN SCHOOLS (1973-74)  
WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT UNIVERSITY OF  
MICHIGAN, MICHIGAN STATE, WAYNE STATE, WESTERN MICHIGAN, EASTERN  
MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN OR OUT OF STATE

	<u>UM</u>	<u>MSU</u>	<u>WSU</u>	<u>WMU</u>	<u>EMU</u>
Number of Teachers . . . . .	6400. .(1%). .12735. .(3%). .	12659. .(1%). .	12847. .(2%). .	10480. .(0%). .	
Number of New Teachers . . . . .	439. .(4%). .1100. .(-3%). .	466. .(-20%). .	983. .(-7%). .	716. .(-10%). .	
Degrees					
Bachelors . . . . .	2970. .(-3%). .8548. .(1%). .	6658. .(-4%). .	8864. .(0%). .	6143. .(-3%). .	
Masters . . . . .	3309. .(6%). .3996. .(10%). .	5738. .(8%). .	3898. .(9%). .	4171. .(5%). .	
Doctorate . . . . .	39. .(-26%). .28. .(-40%). .	49. .(20%). .	12. .(-33%). .	10. .(-68%). .	
Specialist. . . . .	58. .(18%). .55. .(8%). .	166. .(11%). .	32. .(7%). .	135. .(12%). .	
No Degree . . . . .	24. .(-17%). .108. .(-26%). .	48. .(-38%). .	41. .(-41%). .	21. .(47%). .	
Mean Salary . . . . .	13382. .(5%). .12087. .(6%). .	13702. .(3%). .	11867. .(5%). .	13084. .(5%). .	
Race					
Caucasian . . . . .	5885. .(0%). .12330. .(3%). .	10225. .(0%). .	12446. .(2%). .	9931. .(-1%). .	
Negro . . . . .	478. .(13%). .348. .(14%). .	2353. .(7%). .	360. .(12%). .	511. .(8%). .	
Indian, Oriental, Spanish American) . . . . .	37. .(28%). .	47. .(7%). .	81. .(11%). .	73. .(26%). .	38. .(27%). .
Experience					
Mean (years): . . . . .	10.0. . . . .	7.4. . . . .	8.9. . . . .	9.8. . . . .	
Range (years): . . . . .	0-46. . . . .	0-44. . . . .	0-49. . . . .	0-49. . . . .	
Teaching Level					
All Grades	665. .(14%). .559. .(11%). .	1604. .(7%). .	474. .(5%). .	444. .(14%). .	
Elem. (-6, K-8)	2693. .(-1%). .5994. .(2%). .	6737. .(-3%). .	6152. .(0%). .	5567. .(-4%). .	
Jr. High	1132. .(0%). .2497. .(3%). .	1620. .(5%). .	2331. .(4%). .	1910. .(1%). .	
Senior High	1722. .(-1%). .3243. .(3%). .	2474. .(1%). .	3420. .(5%). .	2338. .(5%). .	
Jr./Snr. High	127. .(-7%). .380. .(-9%). .	81. .(1%). .	438. .(1%). .	195. .(2%). .	

33.

TABLE 22

COMPARISON OF CERTIFIED CLASSROOM TEACHERS IN MICHIGAN SCHOOLS (1973-74)  
 WHO RECEIVED THEIR INITIAL PROFESSIONAL PREPARATION AT UNIVERSITY OF  
 MICHIGAN, MICHIGAN STATE, WAYNE STATE, WESTERN MICHIGAN, EASTERN  
 MICHIGAN, CENTRAL MICHIGAN, NORTHERN MICHIGAN, OTHER MICHIGAN  
 INSTITUTIONS, AND OUT OF STATE

	<u>CMU</u>	<u>NMU</u>	<u>Other</u>	<u>Mich. Inst.</u>	<u>Out of State</u>
Number of Teachers	11211. .(4%)	3779. .(3%)	11574. .(5%)	17483. .(-1%)	
Number of New Teachers	1138. .(12%)	294. .(-4%)	990. .(0%)	590. .(-5%)	
Degrees					
Bachelors	8315. .(2%)	2627. .(2%)	7788. .(2%)	10466. .(-7%)	
Masters	2790. .(12%)	1126. .(7%)	3371. .(11%)	6769. .(9%)	
Doctorate	6. .(75%)	2. .(67%)	14. .(-33%)	67. .(-45%)	
Specialist	27. .(0%)	18. .(6%)	51. .(16%)	143. .(13%)	
No Degree	73. .(-16%)	6. .(-67%)	350. .(31%)	38. .(-1%)	
Mean Salary	11823. .(5%)	11737. .(5%)	12165. .(4%)	13372. .(6%)	
Race					
Caucasian	11093. .(4%)	3749. .(2%)	11100. .(5%)	13597. .(-2%)	
Negro	88. .(26%)	22. .(10%)	397. .(14%)	3683. .(1%)	
(Indian, Oriental)					
Spanish American	30. .(11%)	8. .(33%)	77. .(26%)	203. .(12%)	
Experience					
Mean (years)	8.8	8.8	8.	10.7	
Range (years)	0-47	0-49	0-50	0-46	
Teaching Level					
All Grades	326. .(16%)	1142. .(-4%)	452. .(9%)	967. .(3%)	
Elem. (K-6, K-8)	5102. .(1%)	1514. .(0%)	5544. .(4%)	8354. .(-2%)	
Jr. High	2094. .(7%)	671. .(8%)	1984. .(4%)	3244. .(-1%)	
Senior High	3201. .(6%)	1110. .(4%)	3207. .(9%)	4380. .(-3%)	
Jr./Snr. High	455. .(-4%)	336. .(0%)	387. .(2%)	410. .(-1%)	

TABLE 23

COMPARISON OF ADMINISTRATORS IN MICHIGAN SCHOOL DISTRICTS (1972-73) WHO RECEIVED  
THEIR INITIAL PROFESSIONAL PREPARATION AT UNIVERSITY OF MICHIGAN, MICHIGAN,  
STATE, WAYNE STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, CENTRAL MICHIGAN,  
NORTHERN MICHIGAN OR OUT OF STATE

	<u>UM</u>	<u>MSU</u>	<u>WSU</u>	<u>WMU</u>	<u>EMU</u>
Number of Administrators	701. (-1%)	940. (8%)	1505. (2%)	878. (0%)	837. (4%)
Degrees					
Bachelors	28. (17%)	89. (9%)	42. (14%)	88. (-13%)	64. (8%)
Masters	573. (-3%)	720. (9%)	1234. (0%)	711. (1%)	639. (4%)
Doctorate	72. (20%)	61. (-3%)	154. (1%)	26. (13%)	25. (-17%)
Specialist	26. (-10%)	69. (17%)	71. (11%)	53. (6%)	108. (6%)
No Degree	2. (0%)	1. (0%)	4. (300%)	0. (0%)	1. (0%)
Mean Salary	<u>21621.</u> (5%)	<u>20159.</u> (5%)	<u>22188.</u> (4%)	<u>19337.</u> (5%)	<u>20712.</u> (4%)
Race					
Caucasian	604. (-3%)	901. (7%)	1121. (-3%)	854. (0%)	789. (3%)
Negro	93. (13%)	33. (27%)	37. (18%)	24. (0%)	47. (12%)
(Indian, Oriental, Spanish American)	4. (0%)	6. (500%)	7. (133%)	Q. (-100%)	1. (0%)
Experience					
Mean (years)	19.7.	15.6.	21.9.	17.2.	16.8
Range (years)	0-49.	0-44.	0-49.	Q-49.	0-45

TABLE 24

COMPARISON OF ADMINISTRATORS IN MICHIGAN SCHOOL DISTRICTS (1972-73) WHO RECEIVED  
THEIR INITIAL PROFESSIONAL PREPARATION AT UNIVERSITY OF MICHIGAN, MICHIGAN  
STATE, WAYNE STATE, WESTERN MICHIGAN, EASTERN MICHIGAN, CENTRAL MICHIGAN  
NORTHERN MICHIGAN, OTHER MICHIGAN INSTITUTIONS AND OUT OF STATE

	<u>CMU</u>	<u>NMU</u>	<u>Other Mich. Inst.</u>	<u>Other Out of State</u>
Number of Administrators	.785. .(6%)	326. .(3%)	747. .(3%)	1346. .(2%)
Degrees				
Bachelors	97. .(5%)	44. .(16%)	93. .(2%)	156. .(-4%)
Masters	633. .(6%)	255. .(0%)	545. .(2%)	994. .(3%)
Doctorate	10. .(-28%)	5. .(0%)	29. .(-3%)	107. .(4%)
Specialist	45. .(25%)	20. .(0%)	52. .(21%)	87. .(7%)
No Degree	0. .(0%)	2. .(0%)	28. .(4%)	2. .(100%)
Mean Salary	19279. .(5%)	18338. .(5%)	20130. .(5%)	20572. .(5%)
Race				
Caucasian	772. .(5%)	324. .(2%)	706. .(2%)	1113. .(0%)
Negro	10. .(43%)	2. .(100%)	38. .(41%)	223. .(12%)
(Indian, Oriental, Spanish American)	3. .(200%)	0. .(0%)	3. .(0%)	10. .(-23%)
Experience				
Mean (years)	16.1	16.2	17.0	16.6
Range (years)	0-44	0-43	0-48	0-46

TABLE 25

COMPARISON OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS) IN MICHIGAN PUBLIC SCHOOLS (1973-1974) OF TRI-COUNTY AREA WHO RECEIVED THEIR INITIAL PREPARATION AT UNIVERSITY OF MICHIGAN, MICHIGAN STATE, WAYNE STATE WESTERN MICHIGAN OR EASTERN MICHIGAN

	UM	MSU	WSU	WMU	EMU
<b>A. Intermediate School Districts</b>					
Macomb County	.04 (311)	.07 (1015)	.16 (2281)	.05 (630)	.09 (1021)
Oakland County	.12 (863)	.11 (1472)	.18 (2519)	.06 (774)	.12 (1405)
Wayne County	.32 (2282)	.11 (1437)	.60 (8443)	.07 (903)	.36 (4107)
B. Total for Tri-County	.49 (3456)	.29 (3924)	.94 (13243)	.17 (2307)	.58 (6533)
C. Total for State	7099	13669	14162	13719	11313

TABLE 26

COMPARISON OF PROFESSIONAL PERSONNEL (TEACHERS AND ADMINISTRATORS IN MICHIGAN PUBLIC SCHOOLS (1973-1974) OF TRI-COUNTY AREA WHO RECEIVED THEIR INITIAL PREPARATIONS AT UNIVERSITY OF MICHIGAN, MICHIGAN STATE, WAYNE STATE WESTERN MICHIGAN, EASTERN MICHIGAN; CENTRAL MICHIGAN, NORTHERN MICHIGAN, OTHER MICHIGAN INSTITUTIONS AND OUT OF STATE

	CMU	NMU	Other Mich. Institutions	Out of State
A. <u>Intermediate School Districts</u>				
Macomb County	.06 (683)	.06 (266)	.10 (1238)	.07 (1358)
Oakland County	.07 (832)	.06 (231)	.14 (1676)	.13 (2430)
Wayne County	.05 (590)	.05 (224)	.16 (2040)	.24 (4502)
B. Total for Tri-County	.18 (2105)	.18 (721)	.40 (4954)	.44 (8290)
C. Total for State	11991	4102	12315	18824

CATEGORIES IN REGISTER OF PROFESSIONAL PERSONNEL  
MICHIGAN DEPARTMENT OF EDUCATION

County Code  
District Number  
Building Number  
Social Security Number  
Sex  
Year of Birth  
Name  
Type of Certificate  
Expiration Year  
Institution Code  
Degree  
Taught Full Time Last Year  
Majors  
Minors  
K-12 Assignment  
Level  
Salary (Dollars Only)  
Total Experience  
Race  
School Year

TABLE 28

## MAJOR-MINOR AND ASSIGNMENT CODES

40

## ADMINISTRATION

AA-Superintendent, General  
 AB-Assistant Superintendent, General  
 AC-Adm. of Finance or Business  
 AD-Adm. of Instruction  
 AE-Adm. of Plant & Facilities  
 AP-Adm. of Employed Personnel  
 AG-Adm. of Research  
 AH-Principal, Secondary  
 AI-Principal, Elementary  
 AJ-Ass't. Principal, Secondary  
 AK-Ass't. Principal, Elementary  
 AL-Consult., Subject Area  
 AM-Consult., Elementary  
 AN-Consult., Secondary  
 AO-Coordinator, Subject Area  
 AP-Supervisor, Elementary  
 AQ-Supervisor, Secondary  
 AR-Special Education Director

## LANGUAGE ARTS

BA-English  
 BB-Dramatics  
 BC-Journalism  
 BD-Speech  
 BE-Radio  
 BF-English & Speech  
 BG-English Journalism  
 BH-Speech & Dramatics

## SOCIAL SCIENCE

CA-Economics  
 CB-Geography  
 CC-History  
 CD-Political Science  
 CE-Psychology  
 CF-Sociology  
 CG-Government  
 CH-Anthropology  
 CI-History & Political Science  
 CJ-Sociology & Anthropology  
 CK-Economics & Pol. Science  
 CX-Social Science

## SCIENCE

DA-Biology  
 DB-Botany  
 DC-Chemistry  
 DD-Natural Science  
 DE-Physics  
 DF-Physical Science  
 DG-Zoology  
 DH-Geology  
 DL-Forestry  
 DJ-General Science  
 DK-Exact Science  
 DL-Conservation  
 DM-Earth Science  
 DN-Chem. & Biology  
 DX-Science

## MATHEMATICS

EA-Algebra  
 EB-Arithmetic  
 EC-Plane Geometry  
 ED-Solid Geometry  
 EE-Trigonometry  
 EF-Calculus  
 EG-Shop Mathematics  
 EH-Analytic Geometry  
 EI-Statistics-Probability  
 EX-Mathematics

## FOREIGN LANGUAGE

FA-French  
 FB-German  
 FC-Greek  
 FD-Latin  
 FE-Russian  
 FF-Spanish  
 FG-Other  
 FH-Italian  
 FI-Polish  
 FJ-Hebrew

## BUSINESS EDUCATION

GA-Accounting  
 GB-Bookkeeping  
 GC-Business English  
 GD-Office Machines  
 GE-Office Practice  
 GF-Shorthand  
 GG-Typing  
 GH-Business Admin.  
 GI-Secretarial Science  
 GJ-Accounting & Bus. Law  
 GK-Commerce  
 GL-General Business  
 GM-Distributive Ed.  
 GN-Retailing & Market.  
 GX-Business Education

## AGRICULTURE

HA-Agriculture  
 HB-Animal Husbandry  
 HC-Agronomy  
 HD-Horticulture

## INDUSTRIAL ARTS &amp; INDUSTRIAL EDUCATION

IA-Industrial Arts  
 IB-Auto Mechanics  
 IC-Industrial Education  
 ID-Machining Shop  
 IE-Printing  
 IF-Farm Shop  
 IG-Ceramics  
 IH-Mechanical Drawing  
 II-Drawing & Design  
 IJ-Wood Shop  
 IK-Metal Shop  
 IL-Metal & Auto. Shop

## MUSIC

JA-Music Theory  
 JB-Applied Music  
 JC-Public School Music  
 JD-Composition  
 JE-Voice  
 JF-Piano  
 JK-Music

## HOME ECONOMICS

KA-Textiles, Clothing & Related Arts  
 KB-Foods & Nutrition  
 KC-Dietetics  
 KD-Child Development  
 KE-Nursery Education  
 KF-Other  
 KG-Family Life Education  
 KX-Home Economics

## ARTS &amp; CRAFTS

LA-Art  
 LB-Arts & Crafts  
 LC-Drawing & Design

## HEALTH &amp; PHYSICAL ED.

MA-Health  
 MB-Physical Education  
 MC-Health & Physical Ed.  
 MD-Recreation  
 ME-Outdoor Education  
 MF-Health & Recreation  
 MG-Othera

## MISCELLANEOUS

NA-Driver Education  
 NB-Safety Education  
 NC-Driver & Safety Ed.  
 ND-Library Science  
 NE-Elementary Grades  
 NF-Adult Education  
 NM-Junior High Grades  
 NO-Nursery  
 NP-Reading  
 NR-Remedial Reading  
 NS-Philosophy  
 NX-Other  
 NT-Counselor

## SPECIAL EDUCATION

SA-Mentally Handicapped  
 SB-Speech Correction  
 SC-Orthopedically Handicapped  
 SD-School Social Worker  
 SE-Emotionally Disturbed  
 SF-Diagnostician  
 SG-Psychologist  
 SH-Homebound and/or Hospitalized  
 SI-Teacher Counselor  
 SJ-Socially Maladjusted  
 SK-Education of the Blind  
 SL-Education of the Deaf  
 SM-Perceptually Handicapped  
 SM-Type C Consultant  
 ST-Teacher of Trainable

TABLE 29

CODES

41

<u>SEX</u>	<u>TYPE OF CERTIFICATE</u>
1 - Male	0 - Certificate not required (i.e. School Social Worker, Psychologist, Admin.)
2 - Female	1 - Elementary Provisional
<u>RACE</u>	2 - Elementary Permanent
1 - American Indian	3 - Secondary Provisional
2 - Caucasian	4 - Secondary Permanent
3 - Negro American	5 - Life
4 - Oriental	6 - Full Year Permit (May be Pending)
5 - Spanish American	7 - State Limited
<u>FULL TIME LAST YEAR</u>	8 - County Limited
1 - Yes	9 - Provisional or Permanent Pending
2 - No	P - Substitute Permit (Person is being used in a full time position)
	Please do not list any permit holders teaching on day-to-day substitute basis.
<u>DEGREE</u>	<u>LEVEL</u>
0 - None	0 - All Grades
1 - Bachelor's	1 - Elementary (K-6 or K-8)
2 - Master's	2 - Jr. High (7-8 or 7-9)
3 - Doctor's	3 - Sr. High (9-12 or 10-12)
4 - Specialist	4 - Jr. - Sr. High
	5 - Central Administration
<u>INSTITUTIONS</u>	
1 - Central Michigan University	59 - Hawaii
2 - Eastern Michigan University	60 - Idaho
3 - Ferris State College	61 - Illinois
4 - Michigan State University	62 - Indiana
5 - Northern Michigan University	63 - Iowa
6 - University of Michigan	64 - Kansas
7 - Wayne State University	65 - Kentucky
8 - Western Michigan University	66 - Louisiana
9 - Adrian College	67 - Maine
10 - Albion College	68 - Maryland
11 - Alma College	69 - Massachusetts
12 - Aquinas College	70 - Minnesota
13 - Calvin College	71 - Mississippi
14 - Andrews University	72 - Missouri
15 - Hillesdale College	73 - Montana
16 - Hope College	74 - Nebraska
17 - Kalamazoo College	75 - Nevada
18 - Madonna College	76 - New Hampshire
19 - Marygrove College	77 - New Jersey
20 - Mercy College	78 - New Mexico
21 - Nazareth College	79 - New York
22 - Olivet College	80 - North Carolina
23 - Siena Heights College	81 - North Dakota
24 - University of Detroit	82 - Ohio
26 - Spring Arbor College	83 - Oklahoma
27 - Grand Valley State College	84 - Oregon
49 - Alabama	85 - Pennsylvania
50 - Alaska	86 - Rhode Island
51 - Arizona	87 - South Carolina
52 - Arkansas	88 - South Dakota
53 - California	89 - Tennessee
54 - Colorado	90 - Texas
55 - Connecticut	91 - Utah
56 - Delaware	92 - Vermont
57 - Florida	93 - Virginia
58 - Georgia	94 - Washington
	95 - West Virginia